

REMARKS

Claims 1-24 are presented for examination. Applicant would like to thank the Examiner for identifying the allowable subject matter.

Objections to Drawings

Figure 7 is objected to for not including a legend such as "Prior Art". Applicant has amended the drawing to include the suggested legend and the amended drawing is being submitted herewith.

Claim Rejections under 35 USC § 102(e)

Claims 1-2, 8, 12-13 and 20-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuwazoe et al. (2002/0078419). Applicants respectfully traverse these rejections.

To anticipate a claim, the reference must teach every element of the claim. *See* MPEP §2131. As to claim 1, Kuwazoe et al. do not teach each and every element of the claim. In the cited sections, Kuwazoe et al. describes computing "a metric based on a received word or received data for each of paths through which such state transitions occur." (Page 1, para. 0007). In contrast, claim 1 recites calculating candidate path metrics for states at time T_n based on previously calculated path metrics for states at time T_{n-1} **and branch metrics associated with transitions** between said states at time T_{n-1} and states at time T_n according to a first trellis. Kuwazoe et al. do not disclose this limitation. Accordingly, Kuwazoe et al. do not teach each and every element of claim 1 as required to anticipate under 35 USC §102(e). Therefore, claim 1 is patentably distinguishable from Kuwazoe et al.

Further, Kuwazoe et al. uses the same pieces of processing for transition from one time period to another (*see* page 5, para. 0045). In contrast, claim recites calculating candidate path metrics for states at T_{n+1} based on said selected path metrics for states at T_n according to a second trellis, **different from said first trellis**. Kuwazoe et al. do not teach this limitation. Accordingly, claim 1 is further patentably distinguishable from Kuwazoe et al.

Claim 2 depends from claim 1 and is patentably distinguishable from Kuwazoe et al. for at least the same reasons as claim 1.

As to claim 4, the Examiner has not provided any reasoning for rejecting claim 4. Applicant believes that claim 4 is in condition for allowance.

Claim 8 depends from claim 1 and is patentably distinguishable from Kuwazoe et al. for at least the same reasons as claim 1. Further, as explained above, Kuwazoe et al. do not teach using a second trellis, different from the first trellis as recited in claim 1. Accordingly, claim 8 is further distinguishable from Kuwazoe et al.

Claim 12 has been rejected in the manner of claim 1. Accordingly, claim 1 is patentably distinguishable from Kuwazoe for at least the same reasons as claim 1.

Claims 13 and 2-21 depend from claim 12 and are patentably distinguishable from Kuwazoe et al. for at least the same reasons as claim 12.

Applicant believes this application and the claims herein to be in a condition for allowance. Should the Examiner have further inquiry concerning these matters, please contact the below named attorney for Applicant.

Respectfully submitted,



Abdul Zindani
Attorney for Applicant
Reg. No. 46,091

Texas Instruments Incorporated
P.O. Box 655474, MS 3999
Dallas, TX 75265
(972) 917-5137